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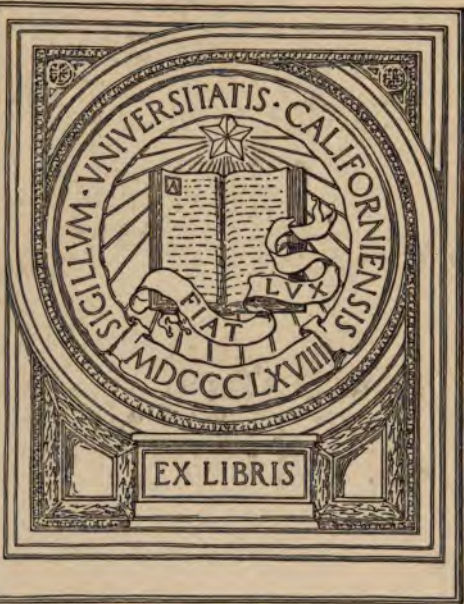


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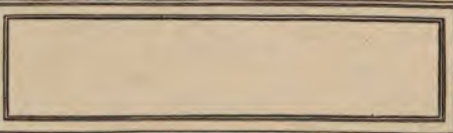


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INFORMATION CONCERNING

# Some of the Principal Navies of the World

A SERIES OF TABLES COMPILED TO  
ANSWER POPULAR INQUIRY

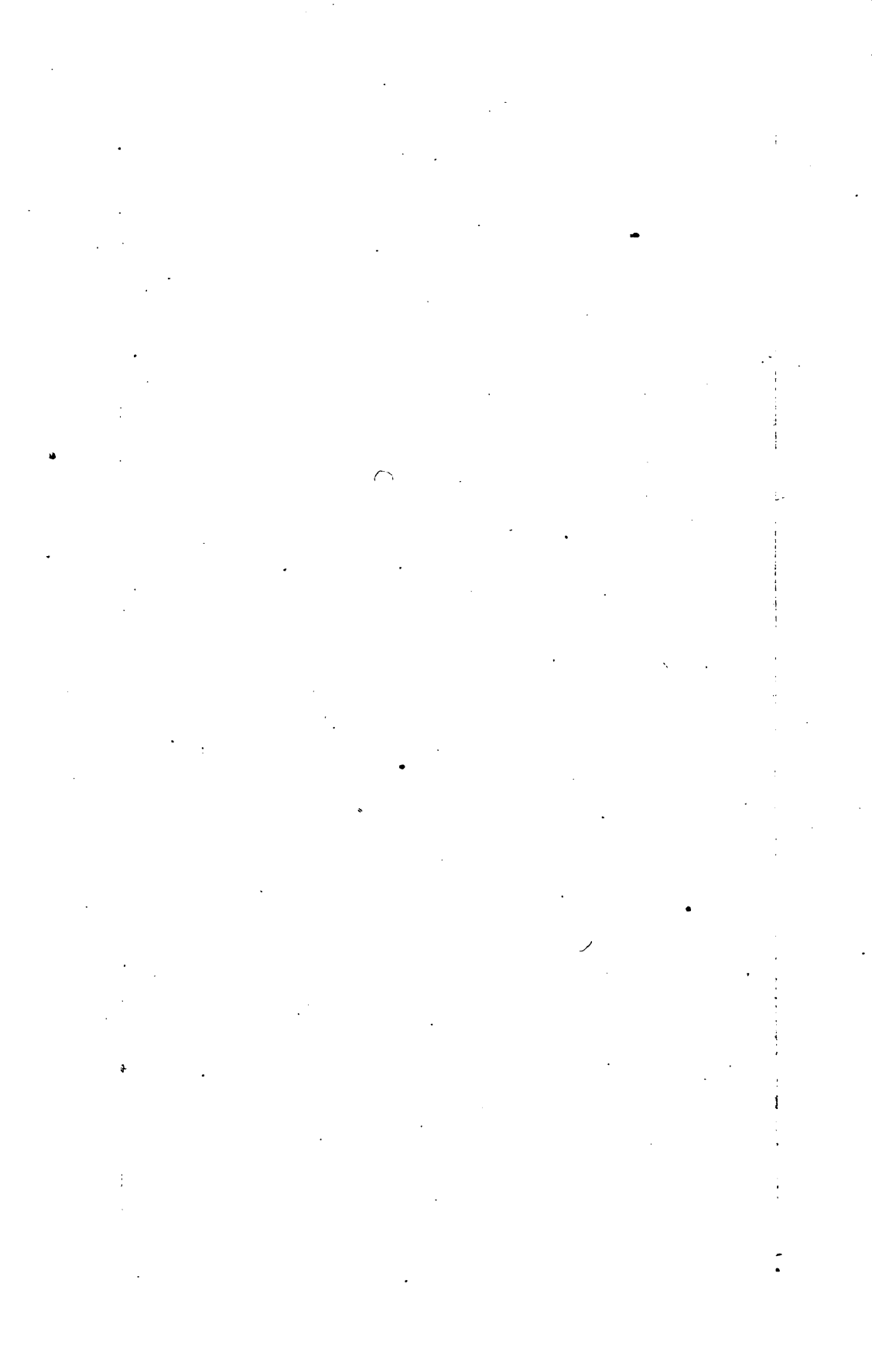
*U.S. Navy Dept*



Office of Naval Intelligence  
October, 1915

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WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1915







## ERRATA.

### Pamphlet "Information Concerning Some of the Principal Navies of the World."

1. In *Table II* (inserted between pages 6 and 7) there are the following omissions and errors:

Add to footnote number 8 the words "tonnage confidential."

Under "United States," for July 1, 1914, the tonnage of torpedo boat destroyers building should be "11,926" instead of "11,956;" the total tons building should be "129,726" instead of "129,756;" and the total tons built and building should be "894,859" instead of "894,889."

Under "United States," for July 1, 1915, the tonnage of armored cruisers built should be "140,080," instead of "140,040;" the tonnage of torpedo boat destroyers building should be "12,354" instead of "12,192;" the total tons building should be "226,154" instead of "225,992;" and the total tons built and building should be "996,190" instead of "996,028."

2. In *Table I*, page 7, change total United States tonnage from "894,889" to "894,859." Add footnote "Tonnage of United States submarines not included."

3. In *Table IV*, page 10, for "United States," under "Armored cruisers," the figures should be "10" instead of "11;" under "Cruisers" they should be "15" instead of "14;" and for "Italy," under "Destroyers," they should be "36" instead of "32."

4. In *Table V*, page 11, for "Austria-Hungary," under "Battle-ships, dreadnaught type," the figure should be "5" instead of "4;" under "Destroyers" it should be "6" instead of "1;" and for "United States," under "Submarines," the figures should be "28" instead of "19."

A vessel capable of steaming on the high seas dry in moderate weather, and with sufficient space for stores and fuel to permit her to steam great distances without having to visit port to refuel, etc. The protection and armament depend on the class.





## DEFINITIONS.

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**Armor:**

Steel plates secured to sides and important parts of ships as a protection against gunfire or close external explosions.

**Armament:**

Offensive weapons with which ships are equipped, such as guns and torpedoes and their tubes.

**Caliber:**

Diameter of the bore of a gun.

**Displacement:**

The weight of water displaced by the floating vessel; in other words, the weight of the vessel.

**Draught:**

Depth of ship from keel to water line.

**Freeboard:**

Height from water line to main deck.

**Knot:**

Sea mile—2,000 yards.

**Speed:**

The speed of vessels is given in knots per hour.

**Battleship:**

A large vessel capable of steaming on the high seas, protected by heavy armor and carrying a heavy armament, including some guns of large caliber.

**Pre-dreadnaught:**

A battleship, usually not over 16,000 tons displacement, having a mixed battery—main battery of heavy guns, 8-inch or above; intermediate battery of guns from 4-inch to 7-inch, inclusive, and secondary battery of small guns less than 4-inch.

**Dreadnaught:**

One-caliber big-gun battleship of 18,000 tons displacement or more and a speed of at least 18 knots. These vessels have a main battery of all big guns (11 inches or more in caliber) and no intermediate battery. The secondary or torpedo defense battery is composed of guns of 3-inch to 5-inch caliber.

**Super-dreadnaught:**

This is a term applied to later vessels of the dreadnaught type, where there are more than 10 big guns in the main battery, or a very large displacement, 25,000 tons or more, and a speed of from 21 to 25 knots. In these the secondary or torpedo defense battery is usually of 5-inch or 6-inch caliber. It is a rather indefinite term.

**Cruiser:**

A vessel capable of steaming on the high seas with sufficient freeboard to keep dry in moderate weather, and with sufficient space for stores and fuel to permit her to steam great distances without having to visit port to refuel, etc. The protection and armament depend on the class.

**Light cruiser:**

A cruiser whose vitals are protected by a light armored deck, and whose gun positions may have light protection. The displacement varies from 1,500 to 5,000 tons, and speed from 16 to 30 or more knots, according to various designs.

**Scout:**

A light cruiser in which protection and armament is considerably reduced to allow for large fuel storage space and machinery installation of great power to give as high a speed as possible.

**Armored cruiser:**

A cruiser protected by moderately heavy armor on sides, etc., armed with heavy guns, 8-inch to 12-inch as a rule, and capable of steaming at high speed 18 to 22 knots (approximately). The armament is usually mixed as in the pre-dreadnaught battleship. This class differs from the pre-dreadnaught battleship in that the armor and armament is lighter and the speed greater. The displacement varies from about 9,000 to 16,000 tons.

**Battle cruiser:**

An armored cruiser having the general dreadnaught characteristics of armament, i. e., main battery of all big guns (11 inches or more in caliber), eight or more, and no intermediate battery. Armor heavier than armored cruisers but lighter than dreadnaughts, and very high speed, from 25 to 30 knots and over, and large displacement, from 17,000 tons up.

**Torpedo craft:**

Vessels whose main offensive armament is the torpedo and which rely on high speed, small size, and a few light guns for defense. Generally capable of steaming on the high seas.

**Torpedo boats:**

Small torpedo craft of from 50 to about 300 tons displacement. Speed varies from about 19 to 29 knots. Small or no guns.

**Destroyers:**

Larger torpedo craft of from about 350 to 1,100 tons displacement, carrying more torpedo tubes and heavier guns than torpedo boats (about 4-inch caliber), and having greater freeboard and speed (from about 25 to 33 knots).

**Submarines:**

Vessels capable of running either on the surface of the water or submerged. The offensive armament is the torpedo and some of the later boats are equipped with light guns for defensive purposes when running on the surface.

**Monitor:**

A heavily armored, very low freeboard, light-draft vessel carrying two or more guns of the largest caliber (10 inches and above). Low speed, about 13 knots.

W

age.

3,756

4,640

2,915

4,889

2,916

3,818

7,815

2,008

A

55

**TABLE I.**  
**RELATIVE ORDER OF WARSHIP TONNAGE.**

[July 1, 1914.]

Present order (tonnage completed).		As would be the case if vessels now building were completed.	
Nation.	Tonnage.	Nation.	Tonnage.
Great Britain.....	2, 158, 250	Great Britain.....	2, 713, 756
Germany.....	951, 713	Germany.....	1, 304, 640
United States.....	765, 133	France.....	899, 915
France.....	665, 748	United States.....	894, 889
Japan.....	519, 640	Japan.....	699, 916
Italy.....	285, 460	Russia.....	678, 818
Russia.....	270, 861	Italy.....	497, 815
Austria-Hungary.....	221, 526	Austria.....	372, 008

TABLE III.  
ACTIVE PERSONNEL.

Rank.	July 1, 1914.								July 1, 1915.
	England.	Germany.	United States.	France.	Japan.	Russia.	Italy.	Austria-Hungary.	United States.
Admirals of the fleet.....	3	2	<sup>1</sup> 1	.....	2	.....	.....	.....	<sup>1</sup> 1
Admirals.....	12	6	.....	.....	6	12	1	1	( <sup>2</sup> )
Vice admirals.....	22	12	.....	15	19	20	10	2	( <sup>3</sup> )
Rear admirals.....	58	22	<sup>4</sup> 25	30	38	21	19	15	<sup>5</sup> 25
Captains and commanders.....	702	154	212	360	270	346	137	80	<sup>5</sup> 211
Other line officers.....	2,508	2,220	1,680	1,419	1,965	1,378	753	558	<sup>6</sup> 1,778
Midshipmen at sea.....	639	448	.....	77	119	.....	73	175	.....
Engineer officers.....	837	577	.....	505	811	538	326	164	.....
Medical officers.....	593	340	336	<sup>6</sup> 390	7,364	286	<sup>6</sup> 259	84	<sup>8</sup> 383
Pay officers.....	750	276	231	211	388	.....	228	<sup>9</sup> 224	221
Naval constructors.....	122	162	75	187	<sup>10</sup> 135	519	107	<sup>11</sup> 141	77
Chaplains.....	147	30	24	.....	.....	85	.....	11	27
Warrant officers.....	2,740	3,183	867	<sup>12</sup> 147	1,569	.....	1,340	387	1,012
Enlisted men.....	119,597	65,797	52,566	60,505	50,050	49,258	36,660	<sup>3</sup> 7,689	52,444
Marine officers.....	465	<sup>14</sup> 177	341	.....	.....	.....	.....	.....	<sup>15</sup> 344
Enlisted men (marines).....	<sup>16</sup> 21,414	<sup>14</sup> 5,791	9,915	.....	.....	.....	.....	.....	9,965
Total.....	150,609	79,197	66,273	63,846	55,736	52,463	39,913	19,531	66,488

- 1 The Admiral of the Navy.
- 2 The officers designated by the President as commanders in chief of the Atlantic, Pacific, and Asiatic fleets hold the rank of admiral while so serving.
- 3 The officers designated by the President as second in command of the Atlantic, Pacific, and Asiatic fleets hold the rank of vice admiral while so serving.
- 4 The United States had on July 1, 1914, temporarily, as extra numbers, due to promotion for war service, and to officers restricted by law to engineering duty on shore only 6 flag officers, 20 captains, 9 commanders, 6 lieutenant commanders, and 1 lieutenant.
- 5 In this list are included the following extra numbers: 7 rear admirals, 20 captains, 9 commanders, 5 lieutenant commanders, and 1 lieutenant.
- 6 Includes pharmacists.
- 7 Includes pharmaceutical officers.
- 8 Includes 32 officers of the Dental Corps.
- 9 Includes 21 officers of the Judge Advocate's Corps.
- 10 Includes 60 ordnance and 10 hydrographic engineers.
- 11 Includes 4 hydrographic engineers.
- 12 Includes adjutants principaux; does not include premier maitres and maitres.
- 13 Includes 4,000 recruits for 42 days.
- 14 Marine infantry and seaman artillery.
- 15 Includes 10 graduates of the Naval Academy, whose commissions as second lieutenants were issued a few days after July 1, 1915.
- 16 Includes 3,130 men of the Coast Guard.



TABLE IV.  
VESSELS BUILT.

[July 1, 1914.]

	Battle- ships, dread- naught type. <sup>1</sup>	Battle- ships. <sup>2</sup>	Battle- cruis- ers. <sup>3</sup>	Ar- mored cruis- ers.	Cruis- ers. <sup>4</sup>	De- stroy- ers.	Tor- pedo boats.	Subma- rines.	Coast- defense vessels. <sup>5</sup>
England.....	20	40	<sup>6</sup> 9	34	<sup>6</sup> 74	<sup>6</sup> 167	49	<sup>6</sup> 75	0
Germany.....	13	20	4	9	41	130	0	27	2
United States.....	8	22	0	<del>1</del> <sup>6</sup>	<del>1</del> <sup>6</sup>	51	13	30	4
France.....	3	18	0	20	9	84	135	64	1
Japan.....	2	13	2	13	13	50	27	13	2
Russia.....	0	7	0	6	9	91	14	30	2
Italy.....	3	8	0	9	6	32	68	49	0
Austria-Hungary.....	3	6	0	2	5	18	39	6	6
United States to July 1, 1915.....	8	22	0	10	15	57	6	36	4

<sup>1</sup> Battleships having a main battery of all big guns (11 inches or more in caliber), except the U. S. Ss. South Carolina and Michigan, which are not considered dreadnaughts on account of slow speed.

<sup>2</sup> Battleships of (about) 10,000 tons or more displacement, and having more than one caliber in the main battery, and U. S. Ss. South Carolina and Michigan.

<sup>3</sup> Armored cruisers having guns of largest caliber in main battery and capable of taking their place in line of battle with the battleships. They have an increase of speed at the expense of carrying fewer guns in main battery, and a decrease in armor protection.

<sup>4</sup> Includes all unarmored cruising vessels above 1,500 tons displacement.

<sup>5</sup> Includes smaller battleships and monitors. No more vessels of this class are being proposed or built by the great powers.

<sup>6</sup> Includes vessels of colonies.

TABLE V.  
VESSELS BUILDING OR AUTHORIZED.

[July 1, 1914.]

	Battle-ships, dread-naught type.	Battle cruisers.	Cruisers.	De-royers.	Torpedo boats.	Subma-rines.
England <sup>1</sup> .....	16	1	<sup>2</sup> 17	<sup>2</sup> 21	0	22
Germany <sup>3</sup> .....	7	4	5	24	0	18
United States.....	7	0	0	11	0	19
* France.....	9	0	0	3	0	22
Japan <sup>4</sup> .....	4	2	0	2	0	2
Russia <sup>5</sup> .....	<sup>6</sup> 7	4	8	44	0	19
Italy.....	7	0	2	15	2	8
Austria-Hungary.....	4	0	5	1	24	6
United States to July 1, 1915..	9	0	0	17	0	40

<sup>1</sup> England has no continuing shipbuilding policy, but usually lays down each year 4 or 5 armored ships, with a proportional number of smaller vessels.

<sup>2</sup> Includes vessels of colonies.

<sup>3</sup> Germany has a continuing shipbuilding program, governed by a fleet law authorized by the Reichstag. For 1914 there are authorized 1 battleship, 1 battle cruiser, 2 cruisers, 12 destroyers. Eventual strength to consist of 41 battleships, 20 armored cruisers, 40 cruisers, 144 destroyers, 72 submarines.

<sup>4</sup> \$78,837,569 authorized to be expended from 1911 to 1917 for the construction of war vessels.

<sup>5</sup> Russian shipbuilding program provides for the completion by 1918 of 4 battle cruisers, 8 small cruisers, 36 destroyers, and 18 submarines.

<sup>6</sup> A fourth dreadnaught is reported as authorized in the spring of 1914 for the Black Sea fleet. If this report is correct, there are 8 dreadnaughts building or authorized.

All countries now at war have greatly increased their building programs, so above notes do not hold good after July, 1914.

The following vessels are *not* included in the tables:

Ships over 20 years old from date of launch, unless they have been reconstructed and rearmed within 5 years.

Torpedo craft over 15 years old.

Transports, colliers, repair ships, converted merchant vessels, or any other auxiliaries.

Vessels of less than 1,500 tons, except torpedo craft. Torpedo craft of less than 50 tons.

NOTE.—Vessels undergoing trials are considered as completed.

TABLE VI.

**BATTLESHIPS AND ARMORED CRUISERS PRIOR TO THE DREAD NAUGHT TYPE.**

[July 1, 1914.]

	Built. <sup>1</sup>		
	Number.	Tons.	Guns, 8-inch and larger.
<b>GREAT BRITAIN.</b>			
Battleships.....	40	589, 385	$\left\{ \begin{array}{l} 152 \text{ 12''} \\ 8 \text{ 10''} \\ 52 \text{ 9. 2''} \end{array} \right.$
Armored cruisers.....	34	406, 800	$\left\{ \begin{array}{l} 68 \text{ 9. 2''} \end{array} \right.$
<b>GERMANY.</b>			
Battleships.....	20	242, 800	$\left\{ \begin{array}{l} 40 \text{ 11''} \\ 40 \text{ 9. 4''} \end{array} \right.$
Armored cruisers.....	9	94, 245	$\left\{ \begin{array}{l} 6 \text{ 9. 4''} \\ 44 \text{ 8. 2''} \end{array} \right.$
<b>UNITED STATES.</b>			
July 1, 1914, battleships.....	22	309, 282	$\left\{ \begin{array}{l} 20 \text{ 13''} \\ 76 \text{ 12''} \end{array} \right.$
July 1, 1915, battleships.....	22	309, 282	$\left\{ \begin{array}{l} 104 \text{ 8''} \end{array} \right.$
July 1, 1914, armored cruisers.....	10	140, 080	$\left\{ \begin{array}{l} 16 \text{ 10''} \end{array} \right.$
July 1, 1915, armored cruisers .....	10	140, 080	$\left\{ \begin{array}{l} 24 \text{ 8''} \end{array} \right.$
<b>FRANCE.</b>			
Battleships.....	18	262, 675	$\left\{ \begin{array}{l} 66 \text{ 12''} \\ 8 \text{ 10. 8''} \\ 72 \text{ 9. 4''} \end{array} \right.$
Armored cruisers.....	20	201, 724	$\left\{ \begin{array}{l} 68 \text{ }^2 \text{ 7. 6''} \end{array} \right.$
<b>JAPAN.</b>			
Battleships.....	13	191, 380	$\left\{ \begin{array}{l} 52 \text{ 12''} \\ 32 \text{ 10''} \\ 6 \text{ 8''} \end{array} \right.$
Armored cruisers.....	13	138, 483	$\left\{ \begin{array}{l} 16 \text{ 12''} \\ 50 \text{ 8''} \end{array} \right.$
<b>ITALY.</b>			
Battleships.....	8	96, 100	$\left\{ \begin{array}{l} 16 \text{ 12''} \\ 8 \text{ 10''} \\ 56 \text{ 8''} \end{array} \right.$
Armored cruisers.....	9	74, 020	$\left\{ \begin{array}{l} 19 \text{ 10''} \\ 6 \text{ 8''} \end{array} \right.$

<sup>1</sup> Ships over 20 years old from date of launch not included.<sup>2</sup> 7.6-inch, largest caliber carried.

TABLE VII.

**DREADNAUGHT TYPE OF BATTLESHIPS, WITH CONTEMPORARIES  
OF OVER 18,000 TONS DISPLACEMENT, AND ARMORED CRUISERS  
OF INVINCIBLE TYPE (NOW CALLED BATTLE CRUISERS).**

[July 1, 1914.]

	Built.			Building, or authorized.		
	Num- ber.	Tons.	Guns.	Num- ber.	Tons. <sup>1</sup>	Guns. <sup>1</sup>
<b>GREAT BRITAIN.</b>						
Battleships.....	20	423, 350	{ 100 13.5'' 100 12'' }	16	421, 000	{ 20 13.5'' 112 15'' }
Battle cruisers.....	9	188, 200	{ 24 13.5'' 48 12'' }	1	28, 500	8 13.5''
<b>GERMANY.</b>						
Battleships.....	13	285, 770	{ 98 12'' 48 11'' }	7	187, 052	{ 24 15'' 40 12'' }
Battle cruisers.....	4	88, 749	38 11''	4	110, 175	32 12''
<b>UNITED STATES.</b>						
Battleships.....	8	189, 650	{ 64 12'' 20 14'' }	7	213, 800	80 14''
Battle cruisers.....						
<b>FRANCE.</b>						
Battleships.....	3	69, 276	36 12''	9	216, 748	{ 90 13.4'' 12 12'' }
Battle cruisers.....						
<b>JAPAN.</b>						
Battleships.....	2	41, 600	24 12''	4	122, 400	48 14''
Battle cruisers.....	2	55, 000	16 14''	2	55, 000	16 14''
<b>RUSSIA.</b>						
Battleships.....				7	<sup>2</sup> 159, 409	84 12''
Battle cruisers.....				4	128, 000	36 14''?
<b>ITALY.</b>						
Battleships.....	3	62, 644	38 12''	7	187, 150	{ 32 15'' 39 12'' }
Battle cruisers.....						
<b>AUSTRIA.</b>						
Battleships.....	3	60, 030	36 12''	5	118, 010	{ 40 14'' 12 12'' }
Battle cruisers.....						

<sup>1</sup> Estimated.

<sup>2</sup> A fourth dreadnaught of 22,435 tons for the Black Sea fleet is reported to have been authorized in the spring of 1914. If the report is correct "tons" column should show 181,844, and "guns" column 96 12''.

TABLE VII—Continued.

**DREADNAUGHT TYPE OF BATTLESHIPS, WITH CONTEMPORARIES  
OF OVER 18,000 TONS DISPLACEMENT, AND ARMORED CRUISERS  
OF INVINCIBLE TYPE (NOW CALLED BATTLE CRUISERS)—Con.**

[July 1, 1914.]

	Built.			Building, or authorized.		
	Num- ber..	Tons.	Guns.	Num- ber.	Tons. <sup>1</sup>	Guns. <sup>1</sup>
<b>BRAZIL.</b>						
Battleships.....	2	38,562	24 12''	<sup>2</sup> 1	30,000	8 or 10 15''
Battle cruisers.....						
<b>ARGENTINA.</b>						
Battleships.....	<sup>3</sup> 1	27,940	12 12''	1	27,940	12 12''
Battle cruisers.....						
<b>CHILE.</b>						
Battleships.....				2	56,000	20 14''
Battle cruisers.....						

[Correct to July 1, 1915.]

<b>UNITED STATES.</b>						
Battleships.....	8	189,650	{ 64 12'' 20 14'' }	9	277,800	104 14''
Battle cruisers.....						

<sup>1</sup> Estimated.

<sup>2</sup> Authorized but apparently not yet laid down (1915.)

<sup>3</sup> Ran trials in Sept., 1913, and is therefore considered completed for the purposes of these tables, though not turned over to the Argentine Government until early in 1915.

TABLE VIII.

**BATTLESHIPS, ARMORED CRUISERS, AND CRUISERS (SCOUTS) OF  
THE SIX PRINCIPAL NAVAL POWERS, LAUNCHED 1906-1913.**

Year.	Bat- tle- ships.	Ton- nage.	Ar- mored cruis- ers. <sup>1</sup>	Ton- nage.	Cruis- ers.	Ton- nage.	Total.	Total tonnage.
<b>GREAT BRITAIN.</b>								
1906.....	3	50,900	2	29,200	.....	.....	5	80,100
1907.....	3	55,800	4	66,350	.....	.....	7	122,150
1908.....	2	38,500	.....	.....	1	3,300	3	41,800
1909.....	2	39,150	1	18,750	6	25,920	9	83,820
1910.....	3	63,000	1	26,350	4	18,660	8	108,010
1911.....	5	115,500	3	63,950	5	22,620	13	202,070
1912.....	4	100,800	1	27,000	5	24,900	10	152,700
1913.....	4	105,000	1	28,500	5	23,320	10	156,820
Total.....	26	568,650	13	260,100	26	118,720	65	947,470
<b>GERMANY.</b>								
1906.....	2	25,964	2	22,832	2	6,790	6	55,586
1907.....	.....	.....	.....	.....	2	6,988	2	6,988
1908.....	4	74,408	1	15,550	2	7,824	7	97,782
1909.....	3	67,320	1	19,000	3	12,843	7	99,163
1910.....	1	22,440	1	22,637	.....	.....	2	45,072
1911.....	3	72,000	1	22,637	4	21,652	8	116,287
1912.....	2	48,220	1	25,000	2	9,652	5	82,879
1913.....	3	76,164	2	54,175	1	4,900	6	135,239
Total.....	18	386,516	9	181,831	16	70,649	43	638,996
<b>UNITED STATES.</b>								
1906.....	1	16,000	2	29,000	.....	.....	3	45,000
1907.....	.....	.....	.....	.....	3	11,250	3	11,250
1908.....	3	52,000	.....	.....	.....	.....	3	52,000
1909.....	2	41,825	.....	.....	.....	.....	2	41,825
1910.....	1	21,825	.....	.....	.....	.....	1	21,825
1911.....	2	52,000	.....	.....	.....	.....	2	52,000
1912.....	2	54,000	.....	.....	.....	.....	2	54,000
1913.....	.....	.....	.....	.....	.....	.....	.....	.....
1914.....	2	55,000	.....	.....	.....	.....	2	55,000
Total.....	13	292,650	2	29,000	3	11,250	18	332,900

<sup>1</sup> Includes battle cruisers.

TABLE VIII—Continued.

**BATTLESHIPS, ARMORED CRUISERS, AND CRUISERS (SCOUTS) OF  
THE SIX PRINCIPAL NAVAL POWERS, LAUNCHED 1906-1913—  
Continued.**

Year.	Bat- tle- ships.	Ton- nage.	Ar- mored cruis- ers. <sup>1</sup>	Ton- nage.	Cruis- ers.	Ton- nage.	Total.	Total tonnage.
<b>JAPAN.</b>								
1906.....	1	19,350	1	13,750	.....	.....	2	33,100
1907.....	1	19,800	2	29,200	2	5,380	5	54,380
1908.....	.....	.....	.....	.....	1	1,350	1	1,350
1909.....	.....	.....	.....	.....	.....	.....	.....	.....
1910.....	1	20,800	.....	.....	.....	.....	1	20,800
1911.....	1	20,800	.....	.....	3	15,000	4	35,800
1912.....	.....	.....	2	55,000	.....	.....	2	55,000
1913.....	.....	.....	2	55,000	.....	.....	2	55,000
Total.....	4	80,750	7	152,950	6	21,730	17	255,430
<b>FRANCE.</b>								
1906.....	.....	.....	1	13,428	.....	.....	1	13,428
1907.....	1	14,636	1	13,779	.....	.....	2	28,415
1908.....	.....	.....	1	13,779	.....	.....	1	13,779
1909.....	5	90,145	.....	.....	.....	.....	5	90,145
1910.....	1	18,029	.....	.....	.....	.....	1	18,029
1911.....	2	46,184	.....	.....	.....	.....	2	46,184
1912.....	2	46,184	.....	.....	.....	.....	2	46,184
1913.....	3	69,516	.....	.....	.....	.....	3	69,516
Total.....	14	284,694	3	40,986	.....	.....	17	325,680
<b>RUSSIA.</b>								
1906.....	3	42,000	3	31,000	.....	.....	6	73,000
1907.....	1	16,600	1	8,000	.....	.....	2	24,600
1908.....	.....	.....	.....	.....	.....	.....	.....	.....
1909.....	.....	.....	.....	.....	.....	.....	.....	.....
1910.....	.....	.....	.....	.....	.....	.....	.....	.....
1911.....	4	92,000	.....	.....	.....	.....	4	92,000
1912.....	.....	.....	.....	.....	.....	.....	.....	.....
1913.....	1	22,435	.....	.....	.....	.....	1	22,435
Total.....	9	173,035	4	39,000	.....	.....	13	212,035

<sup>1</sup> Includes battle cruisers.

TABLE IX.  
PRINCIPAL CHARACTERISTICS OF BATTLESHIPS RECENTLY COMPLETED OR APPROACHING COMPLETION

	De- signed speed.	Displace- ment.	Length between perpen- diculars.	Beam.	Draft.	Comple- ment.	Battery.	Torpedo tubes.	Maxi- mum thickness armor belt.	Date launched.	Date of comple- tion.
King George V (Great Brit- ain).	21	24,000	555	89	Feet. 27.5	900	{ 8 15" 24 4"	5	12	Oct., 1911	Nov., 1912
Kaiser (Germany).....	21	24,110	535	95	27	1,073	{ 10 12" 14 5.9"	6	12	Mar., 1911	Aug., 1912
Arkansas (United States)...	20.5	26,000	554	93	28.5	1,040	{ 12 12" 21 5"	2	.....	Jan. 1911	Sept., 1912
New York (United States).	21	27,000	565	95	28.5	1,070	{ 10 14" 21 5"	4	.....	Oct., 1912	Apr., 1914
Paris (France).....	20	23,092	541	88.5	29	915	{ 12 12" 22 5.5"	4	10.5	Sept., 1912	July., 1914
Kawachi (Japan).....	20.5	20,800	500	84	27.5	1,000	{ 12 12" 10 6"	5	9	Oct., 1910	May, 1912
Dante Alighieri (Italy)....	23	18,600	520	87	27.5	1,030	{ 12 12" 20 4.7"	3	9	Aug., 1910	Dec., 1912
Conte di Cavour (Italy)....	22	22,340	554	92	27.5	980	{ 13 12" 20 4.7"	3	12	Aug., 1911	.....



TABLE IX—Continued.  
 PRINCIPAL CHARACTERISTICS OF BATTLESHIPS RECENTLY COMPLETED OR APPROACHING COMPLETION—  
 Continued.

	De- signed speed.	Displace- ment.	Length between perpen- diculars.	Beam.	Draft.	Comple- ment.	Battery.	Torpedo tubes.	Maxi- mum thickness armor belt.	Date launched.	Date of comple- tion.
Sebastopol (Russia).....	23	23, 000	590	<i>Feet.</i> 85	<i>Feet.</i> 27. 5	(?)	{ 12 12" 20 4. 7"	{ 4	<i>Inches.</i> 9	June, 1911	.....
Viribus Unitis (Austria)...	21	20, 010	492	89	26	1, 000	{ 12 12" 12 5. 9"	{ 4	11	June, 1911	Sept., 1912
Moreno (Argentina).....	22. 5	28, 000	575	95. 5	28	1, 050	{ 12 12" 12 6"	{ 2	12	Sept., 1911	Apr., 1915
Nevada (United States)....	20. 5	27, 500	575	95	28. 5	912	{ 10 14" 21 5"	{ 4	.....	July, 1914	{ Oct., 1915 (trials).
Arizona (United States)....	21	31, 400	600	97	29	915	{ 12 14" 22 5"	{ 4	.....	July, 1915	.....
Queen Elizabeth (Great Britain).	25	28, 000	600	94	27. 5	750	{ 8 15" 16 6"	{ 5	13. 5	Oct., 1913	.....
Royal Sovereign (Great Britain).	21	25, 750	580	92	(?)	(?)	{ 10 15" 12 6"	{ (?)	13. 5	.....	.....
Lyon (France).....	23	29, 030	623	95	(?)	(?)	{ 16 13. 4" 28 5. 5"	{ (?)	13. 8	.....	.....

Normandie (France).....	21. 5	24, 828	574	88. 5	29	1, 085	{ 12 13. 4" 24 5. 5"	} 6	12. 6	.....
Ersatz Wörth (Germany).....	.....	28, 500	626	100	32. 8	.....	{ 8 15" 16 5. 9"	{ (?)	15	.....
Kronprinz (Germany).....	22(?)	26, 000	573	97	27. 5	1, 150	{ 10 12" 14 5. 9"	} 5	13. 8	Feb., 1914 .....

**TABLE X.**  
**PRINCIPAL CHARACTERISTICS OF BATTLE CRUISERS AND ARMORED CRUISERS RECENTLY COMPLETED**  
**OR APPROACHING COMPLETION.**

	De- signed speed.	Displace- ment.	Length between perpen- diculars.	Beam.	Draft.	Comple- ment.	Battery.	Torpedo tubes.	Maxi- mum thickness armor belt.	Date launched.	Date of comple- tion.
Princess Royal (Great Brit- ain).....	29	26, 350	<i>Feet.</i> 660	<i>Feet.</i> 88. 5	<i>Feet.</i> 27. 5	950	{ 8 13. 5" 16 4"	} 2	<i>Inches.</i> 9	Apr., 1911	Oct., 1912
Kongo (Japan).....	27	27, 500	680	92	27. 5	?	{ 8 14" 16 6"	} 8	11	May, 1912	Aug., 1913
Fuso (Japan).....	22	30, 600	673	?	?	?	{ 12 14" 16 6"	} ?	12	Mar., 1914	.....
Tiger (Great Britain).....	30	28, 500	720	90	30(?)	?	{ 8 13. 5" 12 6"	} 2	9	Dec., 1913	.....
Moltke (Germany).....	26	22, 637	610	96½	27	1, 012	{ 10 11" 12 6"	} 4	10	Apr., 1910	Sept., 1911
Kurama (Japan).....	22	14, 600	450	75½	26	850	{ 4 12" 8 8"	} 3	7	Oct., 1907	Feb., 1911

TABLE XI.

## TIME REQUIRED TO BUILD SOME RECENT BATTLESHIPS OF THE FIVE PRINCIPAL NAVAL POWERS.

Names.	Ton- nage.	Date of contract or order.	Keel laid.	Launched.	Commis- sioned.
<b>GREAT BRITAIN.</b>					
Bellerophon.....	18, 600	Sept., 1906 <sup>1</sup>	Dec., 1906	July, 1907	Feb., 1909
Superb.....	18, 600	Dec., 1906	Feb., 1907	Nov., 1907	May, 1909
Collingwood.....	19, 250	Oct., 1907 <sup>1</sup>	Feb., 1908	Nov., 1908	Apr., 1910
Vanguard.....	19, 250	Mar., 1908	Apr., 1908	Feb., 1909	Mar., 1910
Neptune.....	19, 900	Nov., 1908 <sup>1</sup>	Jan., 1909	Sept., 1909	Jan., 1911
Monarch.....	22, 500	Dec., 1909	Apr., 1910	Mar., 1911	Apr., 1912
Thunderer.....	22, 500	Dec., 1909	Apr., 1910	Feb., 1911	June, 1912
King George V.....	24, 000	Nov., 1910	Jan., 1911	Oct., 1911	Nov., 1912
Marlborough.....	25, 000	—, 1911 <sup>1</sup>	Jan., 1912	Oct., 1912	June, 1914
<b>GERMANY.</b>					
Nassau.....	18, 602	May, 1906 <sup>1</sup>	Aug., 1907	Mar., 1908	Oct., 1909
Westfalen.....	18, 602	Oct., 1906	Aug., 1907	July, 1908	Nov., 1909
Posen.....	18, 602	Apr., 1907	July, 1907	Dec., 1908	May, 1910
Rheinland.....	18, 602	Apr., 1907	July, 1907	Sept., 1908	Apr., 1910
Helgoland.....	22, 440	July, 1908	Dec., 1908	Sept., 1909	Aug., 1911
Kaiser.....	24, 110	Sept., 1909 <sup>1</sup>	Dec., 1909	Mar., 1911	Aug., 1912
Prinzregent Luitpold...	24, 406	Apr., 1910	Jan., 1911	Feb., 1912	Aug., 1913
<b>UNITED STATES.</b>					
South Carolina.....	16, 000	July, 1906	Dec., 1906	July, 1908	Mar., 1910
Michigan.....	16, 000	July, 1906	Dec., 1906	May, 1908	Jan., 1910
Delaware.....	20, 000	Aug., 1907	Nov., 1907	Feb., 1909	Apr., 1910
North Dakota.....	20, 000	Aug., 1907	Dec., 1907	Nov., 1908	Apr., 1910
Utah.....	21, 825	Nov., 1908	Feb., 1909	Dec., 1909	Aug., 1911
Wyoming.....	26, 000	Oct., 1909	Feb., 1910	May, 1911	Sept., 1912
Texas.....	27, 000	Dec., 1910	Apr., 1911	May, 1912	Mar., 1914
<b>FRANCE.</b>					
Vérité.....	14, 636	May, 1902	—, 1903	May, 1907	Jan., 1908
Voltaire.....	18, 029	Dec., 1906	June, 1907	Jan., 1909	Aug., 1911
Danton.....	18, 029	May, 1906 <sup>1</sup>	Jan., 1908	July, 1909	Feb., 1911
Jean Bart.....	23, 092	Aug., 1910	Nov., 1910	Sept., 1911	June, 1913
<b>JAPAN.</b>					
Satsuma.....	19, 350	—, 1904 <sup>1</sup>	May, 1905	Nov., 1906	Apr., 1910
Aki.....	19, 800	—, 1905 <sup>1</sup>	Mar., 1906	Apr., 1907	Apr., 1911
Kawachi.....	20, 800	—, 1908 <sup>1</sup>	Apr., 1909	Oct., 1910	Apr., 1912

<sup>1</sup> Built in Government dockyards.

TABLE XII.

**BATTLESHIPS AND BATTLE CRUISERS<sup>1</sup> AUTHORIZED, 1907-1914.**

	1907		1908		1909		1910		1911	
	B. S.	B. C.	B. S.	B. C.	B. S.	B. C.	B. S.	B. C.	B. S.	B. C.
Great Britain.....	3	.....	1	1	6	<sup>2</sup> 4	4	1	4	1
Germany.....	2	1	3	1	3	1	3	1	3	1
United States.....	1	.....	2	.....	2	.....	2	.....	2	.....
Japan.....	2	2	.....	.....	.....	.....	.....	1	1	3
France.....	.....	.....	.....	.....	.....	.....	2	.....	2	.....

	1912		1913		1914		<sup>4</sup> 1915	
	B. S.	B. C.	B. S.	B. C.	B. S.	B. C.	B. S.	B. C.
Great Britain.....	4	.....	<sup>2</sup> 6	.....	4	.....	.....	.....
Germany.....	1	1	2	1	1	1	.....	.....
United States.....	1	.....	1	.....	3	.....	2	.....
Japan.....	.....	.....	3	.....	.....	.....	.....	.....
France.....	<sup>3</sup> 3	.....	4	.....	1	.....	.....	.....

<sup>1</sup> Armored cruisers able to take position in line of battle.<sup>2</sup> Includes two authorized by colonies.<sup>3</sup> Includes one to replace the Liberté.<sup>4</sup> U. S. only; other nations not considered.

TABLE No. XIII.

## TOTAL NAVAL EXPENDITURES BY PRINCIPAL NAVAL POWERS.

Fiscal year.	Great Britain, Apr. 1- Mar. 31. <sup>1</sup>	United States, July 1-June 30.	Germany, April to March.	France, January to December.
1900-1901.....	\$145,792,850	\$61,721,695	\$37,173,074	\$72,683,180
1901-2.....	150,569,190	68,438,301	46,315,800	67,079,011
1902-3.....	150,679,328	82,977,641	48,818,700	59,217,558
1903-4.....	173,548,058	104,126,192	50,544,000	59,740,222
1904-5.....	179,138,049	116,655,826	49,110,300	60,178,623
1905-6.....	161,117,947	109,725,059	54,918,000	61,565,779
1906-7.....	152,954,342	98,392,144	58,344,300	59,514,296
1907-8.....	151,880,617	117,353,474	69,133,500	<sup>2</sup> 60,685,813
1908-9.....	156,401,161	120,421,579	<sup>2</sup> 80,737,626	<sup>2</sup> 62,194,916
1909-10.....	181,936,341	122,247,365	<sup>2</sup> 95,047,820	<sup>2</sup> 64,899,489
1910-11.....	202,056,258	111,791,980	<sup>2</sup> 103,302,773	74,102,439
1911-12.....	211,596,296	133,559,071	<sup>2</sup> 107,178,480	<sup>2</sup> 80,371,109
1912-13.....	224,443,296	129,787,233	<sup>2</sup> 109,989,096	<sup>2</sup> 81,692,832
1913-14.....	<sup>2</sup> 237,530,459	136,858,301	<sup>2</sup> 112,091,125	<sup>2</sup> 90,164,625
1914-15.....	<sup>2</sup> 260,714,275	<sup>2</sup> <sup>4</sup> 141,872,786	<sup>3</sup> 113,993,329	<sup>2</sup> 123,828,872

<sup>1</sup> Does not include amounts expended under naval works acts during the years 1896-1909, amounting to about \$155,000,000.

<sup>2</sup> Appropriation.

<sup>3</sup> Estimated.

<sup>4</sup> Includes \$4,635,000 this year's allotment of proceeds from sale of the *Idaho* and *Mississippi*.

TABLE No. XIII—Continued.

**TOTAL NAVAL EXPENDITURES BY PRINCIPAL NAVAL POWERS—**  
Continued.

Fiscal year.	Russia, January to December.	Italy, July 1— June 30.	Japan, April to March.	Total.
1900-1901.....	\$42, 101, 212	\$23, 829, 206	( <sup>1</sup> )	.....
1901-2.....	45, 488, 462	23, 875, 532	\$21, 373, 954	\$423, 140, 250
1902-3.....	50, 769, 465	23, 522, 400	17, 654, 528	433, 639, 620
1903-4.....	60, 018, 895	23, 522, 400	17, 553, 279	489, 053, 046
1904-5.....	58, 076, 543	24, 300, 000	10, 018, 024	497, 477, 365
1905-6.....	60, 228, 444	24, 494, 400	11, 378, 202	483, 427, 831
1906-7.....	60, 703, 557	25, 865, 668	30, 072, 061	485, 846, 368
1907-8.....	43, 012, 166	27, 516, 454	35, 124, 346	504, 706, 370
1908-9.....	49, 682, 482	30, 453, 697	39, 347, 332	539, 238, 793
1909-10.....	58, 059, 040	<sup>2</sup> 31, 812, 885	<sup>2</sup> 35, 005, 719	589, 008, 759
1910-11.....	<sup>2</sup> 46, 520, 465	<sup>2</sup> <sup>3</sup> 40, 595, 204	<sup>2</sup> 36, 889, 158	615, 258, 277
1911-12.....	<sup>2</sup> 56, 680, 915	<sup>2</sup> <sup>4</sup> 40, 780, 987	<sup>2</sup> 42, 944, 329	673, 111, 187
1912-13.....	<sup>2</sup> 82, 019, 633	<sup>2</sup> 41, 893, 420	<sup>5</sup> <sup>6</sup> 46, 510, 216	716, 335, 726
1913-14.....	<sup>2</sup> 117, 508, 657	<sup>2</sup> 49, 550, 147	<sup>6</sup> 48, 105, 152	791, 808, 466
1914-15.....	<sup>5</sup> 128, 954, 733	<sup>5</sup> <sup>7</sup> 56, 920, 440	<sup>5</sup> <sup>8</sup> 69, 111, 653	895, 396, 088

<sup>1</sup> Not available.<sup>2</sup> Appropriation.<sup>3</sup> Includes \$4,827,568 made available in 1910.<sup>4</sup> Includes \$3,309,220 made available 1911.<sup>5</sup> Estimated.<sup>6</sup> Revised estimates.<sup>7</sup> Includes two additional appropriations amounting to \$9,950,901 because of present European war.<sup>8</sup> Includes \$18,962,844, estimated for naval expenditures up to Dec. 31, 1914, for war with Germany.

NOTE.—War appropriations for Great Britain, France, and Russia not included in this table.

TABLE XIV.

## COST OF SOME OF THE CAPITAL SHIPS RECENTLY COMPLETED.

Name.	Type.	Nation.	Displacement.	Year completed.	Total cost.
Superb.....	B. S...	England.....	18,600	1909	\$8,158,828
Neptune.....	B. S...	.....do.....	19,900	1911	8,411,497
Hercules.....	B. S...	.....do.....	20,000	1911	8,087,690
Orion.....	B. S...	.....do.....	22,500	1912	9,337,709
Monarch.....	B. S...	.....do.....	22,500	1912	9,182,657
Lion.....	B. C...	.....do.....	26,350	1912	10,065,562
Nassau.....	B. S...	Germany.....	18,602	1909	<sup>1</sup> 8,748,880
Helgoland.....	B. S...	.....do.....	22,440	1911	<sup>1</sup> 11,209,800
Von der Tann.....	B. C...	.....do.....	19,000	1910	<sup>1</sup> 8,726,508
Moltke.....	B. C...	.....do.....	22,637	1911	<sup>1</sup> 10,491,040
Satsuma.....	B. S...	Japan.....	19,350	1910	<sup>2</sup> 9,262,800
Aki.....	B. S...	.....do.....	19,800	1911	<sup>2</sup> 8,764,800
Danton.....	B. S...	France.....	18,030	1911	9,641,707
Voltaire.....	B. S...	.....do.....	18,030	1911	10,520,000
Minas Geraes.....	B. S...	Brazil.....	19,250	1910	8,863,843
Michigan.....	B. S...	United States..	16,000	1910	6,805,924
South Carolina.....	B. S...	.....do.....	16,000	1910	6,683,485
Delaware.....	B. S...	.....do.....	20,000	1910	8,034,994
North Dakota.....	B. S...	.....do.....	20,000	1910	8,472,150

<sup>1</sup> Amount appropriated.<sup>2</sup> Approximately.



TABLE XV.

## AIR CRAFT.

NOTE.—The following table, correct to April 7, 1913, is reprinted. All publications on this subject have due to the European War, been so deleted by both the authors and by the official censors that a comparative table would necessarily be so qualified by footnotes, estimates, etc., as to make the table misleading. The following publications are suggested as being of interest: "All the World's Aircraft," Fred T. Jane; "Taschenbuch der Luftflotten," Rasch and Hornel; "Volamekum-Handbuch für Luftfahrer," Bojkow.

	Mili- tary dirigi- bles.	Private dirigi- bles (esti- mated).	Military aeroplanes (includes monoplanes, biplanes, hydro- aeroplanes).		Private aero- planes (esti- mated).	Avia- tion fields.	Pilots (mili- tary and civil- ian).	Manu- fac- turers.
			Army.	Navy.				
<b>Austria:</b>								
On hand....	5	2	40	6	35	3	60	5
Ordered.....	3							
<b>England:</b>								
On hand....	3	3	101	40	154	31	382	21
Ordered.....	4		47	20				
<b>France:</b>								
On hand....	13	5	450		1,000	39	1,200	20
Ordered.....	7							
<b>Germany:</b>								
On hand....	17	10	152		200	36	320	15
Ordered.....	5							
<b>Italy:</b>								
On hand....	8	0	100		100	14	200	
Ordered.....	2		30					
<b>Japan:</b>								
On hand....	2	0	20		5	3	20	
Ordered.....	1							
<b>Russia:</b>								
On hand....	9	0	250		150	8	118	
Ordered.....	10		0					
<b>United States:</b>								
On hand....	( <sup>1</sup> )	0	20	5	1,000	13	320	6
Ordered.....			3	1				

<sup>1</sup> One dirigible, which is practically useless, is on hand.

The number of pilots can be given only approximately. There are a great many more under instruction who have not received their certificates as pilots.

A large number of the private aeroplanes are experimental machines.

On account of the great number of experimental aeroplanes constructed, it is impossible to state the number of actual manufacturers definitely.

## REFERENCE BOOKS.

PROBABLY MAY BE FOUND IN A PUBLIC LIBRARY.

*Navy Yearbook* (Knight).—Giving annual appropriations and various acts relating to the Navy, beginning 1883; alphabetical list of all United States vessels, with data on same; list of vessels of the principal navies of the world, etc. Printed as a congressional document.

*Fighting ships* (Jane).—Giving a detail description of all fighting ships and showing silhouettes, plans, and elevations of ships, description of uniforms, lists of naval bases, etc.

*The Naval Pocketbook* (Clowes).—Giving detail description of individual ships, lists, and numbers, data concerning guns, etc.

*The Naval Annual* (edited by Viscount Hythe).—Giving a series of essays on the navies of the world, lists, and numbers, and plan and elevation of principal ships.

*All the World's Aircraft* (Jane).—Giving details of aeronautical strength of all the powers.

*Taschenbuch der Luftflotten* (Rasch & Hormel).—Same data as above for aeronautics.

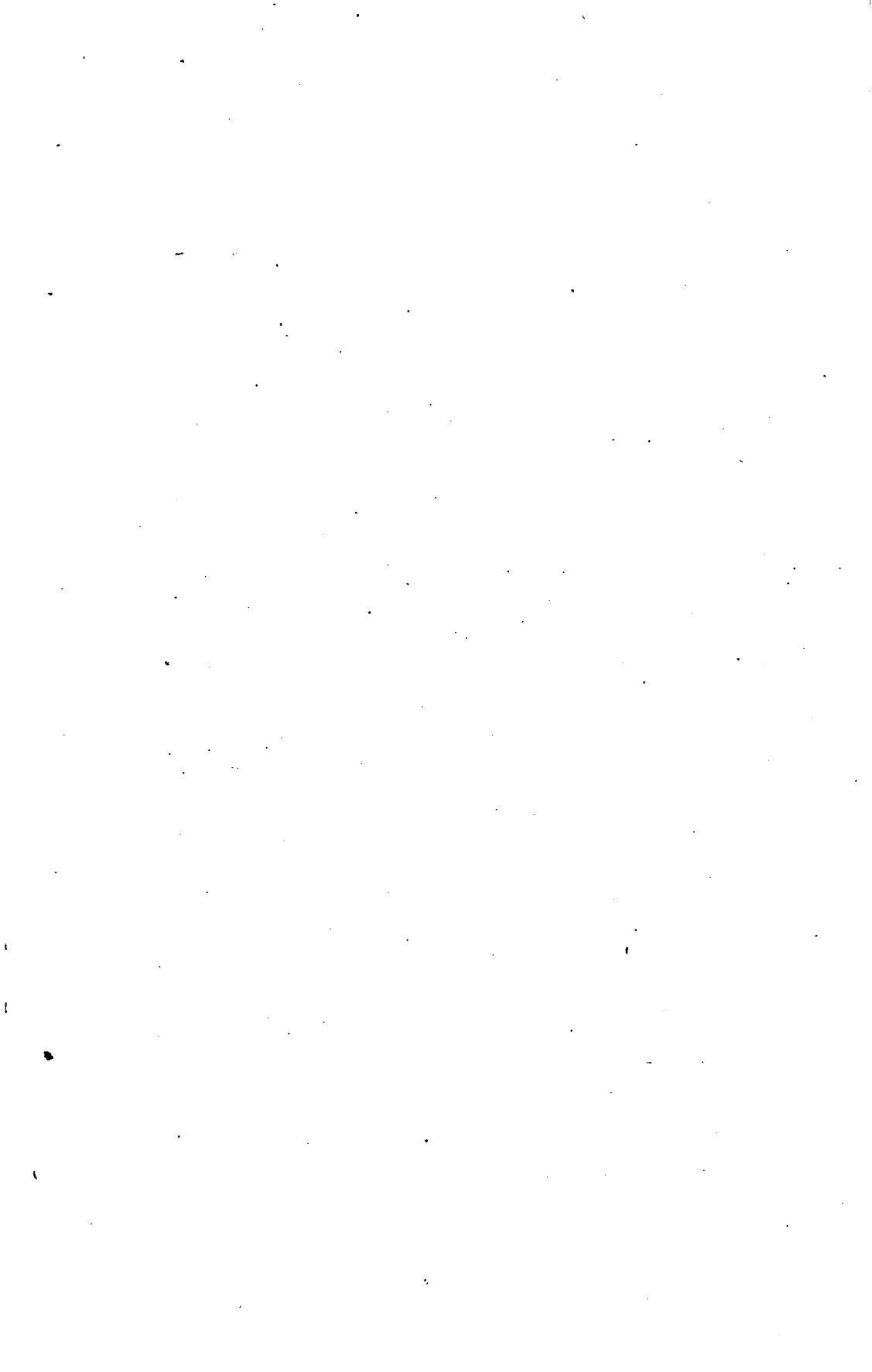
*Volamekum-Handbuch für Luftfahrer* (Boykow).—Same data as above for aeronautics.

For recommendations to Congress and reports of the various bureaus, see annual reports of the Secretary of the Navy.

The tables of "Warship tonnage" and "Sea strength" (Tables I to V, ante) of the principal naval powers are published annually by the Office of Naval Intelligence.







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